



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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(217) 524-1663

March 11, 2010

Thomas J. Crosetto  
Chief, Emergency Response Section 2  
Emergency Response Branch 2  
U.S. EPA, Region 5  
77 West Jackson Boulevard, SE-5J  
Chicago, IL 60604

Re: Sandoval Zinc Site  
LPC# 1210500002  
CERCLIS ID# ILD 053980454  
SF/Tech

Dear Mr. Crosetto:

I am requesting the Region 5 Offices of the United States Environmental Protection Agency (U.S. EPA) assign an On-Scene Coordinator to conduct a time-critical removal assessment and possible removal action within residential properties near the Sandoval Zinc Site located in Sandoval, Marion County, Illinois.

The Sandoval Zinc Site is located east of the City of Sandoval, southeast of the intersection of U.S. Route 51 and U.S. Route 50. The site encompasses approximately 14.16 acres of property and is bounded to the east and south by agricultural land, to the west by a vacant parcel, and to the north by the CSX Railroad tracks. A map is attached that depicts the location of the site.

The Sandoval Zinc Company smelting facility began operating as a primary zinc smelter in 1898. In 1915, the facility began operating as a secondary zinc smelter and continued until 1985. In 1986, the Sandoval Zinc Company was officially dissolved and the owners declared bankruptcy. The property that once contained the smelting facility is now under private ownership.

Wastes produced at the zinc smelting facility were metal-containing cinders and ash. On the abandoned zinc smelting property, waste cinders range from one to ten feet in depth. Cinders that were not utilized by the plant were placed into large piles and offered to the public and to the City of Sandoval for use in constructing and surfacing roadways, driveways, sidewalks, and parking lots. The distribution of the cinder material is random throughout the City of Sandoval.

In October 2009, Illinois EPA's Office of Site Evaluation conducted a CERCLA Expanded Site Inspection of the Sandoval Zinc Company Site. The investigation included the collected of soil, sediment, and waste samples throughout the area. Illinois EPA is currently in the process of

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Collinsville • 2009 Main Street, Collinsville, IL 62234 • (618) 346-5120

Des Plaines • 9511 W. Harrison St., Des Plaines, IL 60016 • (847) 294-4000

Peoria • 5415 N. University St., Peoria, IL 61614 • (309) 693-5463

Champaign • 2125 S. First St., Champaign, IL 61820 • (217) 278-5800

Marion • 2309 W. Main St., Suite 116, Marion, IL 62959 • (618) 993-7200

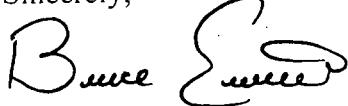
completing the necessary documentation for the placement of the Sandoval Zinc Site on the National Priorities List.

During the Expanded Site Inspection, twenty-seven soil samples were collected from residential properties within Sandoval. These samples were collected within areas suspected of receiving contaminated cinder material from the former Sandoval Zinc facility. According to data collected during the Expanded Site Inspection, significant levels of lead, zinc, and arsenic were found in sixteen residential yards. Although sixteen properties have been identified, additional properties are suspected to contain metal contaminated cinders throughout Sandoval. Attached to this referral are data tables and a map illustrating the location of residential samples.

This time-critical removal referral is focused upon the residential properties previously sampled and those that may potentially contain elevated inorganic contamination that pose a risk to the resident population. Illinois EPA requests that a meeting take place soon in order to share site information and discuss program objectives. At that time, Illinois EPA will also make available additional file information including past CERCLA reports and other key contact information in the area. Please have your On-Scene Coordinator contact Lance Range at (217) 524-1661, or myself, as soon as possible to arrange a meeting, site visit, or discuss any concerns they may have with the site.

As always, the Illinois EPA will provide any assistance to U.S. EPA regarding this matter. Thank you for your consideration and we look forward to hearing from U.S. EPA for this and future removal activities.

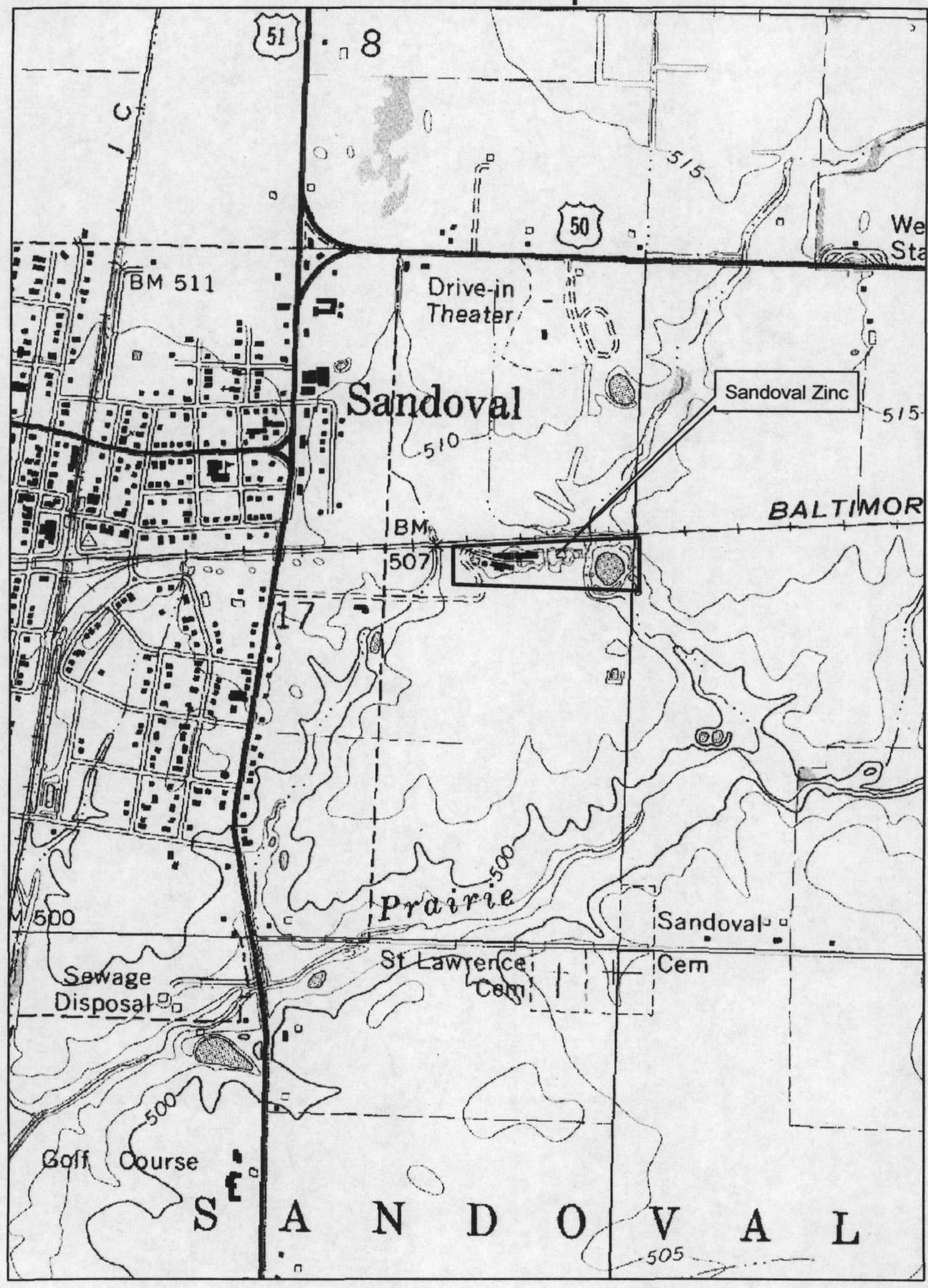
Sincerely,



Bruce Everett  
Office of Site Evaluation  
Division of Remediation Management  
Bureau of Land

bcc: Division File, w/ attachments  
Lance Range, OSE, w/o attachments, via e-mail  
Tom Crause, OSE, w/o attachments, via e-mail  
Michelle Tebrugge, OCR, w/o attachments, via-email  
Jason El-Zein, U.S. EPA, w/o attachments, via e-mail

**Figure 2**  
**Site Area Map**



0 0.05 0.1 0.2 0.3 0.4  
Miles



**Figure 3**  
**Soil Sample Map**



0    0.125    0.25    0.5    0.75    1  
Miles



Sample Number :	ME00T9	ME00W0	X106	ME00W1	X107	ME00W2	X108	ME00W3	X109	ME00W4	X110	ME00W5	X111	ME00W6	X112	ME00W7	X113	ME00W8	X114	ME00W9	X115
Sampling Location :			<th></th> <td><th></th><td><th></th><td><th></th><th></th><th></th><th></th><th></th><th></th><th></th><td><th></th><td><td></td></td></td></td></td></td>		<th></th> <td><th></th><td><th></th><th></th><th></th><th></th><th></th><th></th><th></th><td><th></th><td><td></td></td></td></td></td>		<th></th> <td><th></th><th></th><th></th><th></th><th></th><th></th><th></th><td><th></th><td><td></td></td></td></td>		<th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <td><th></th><td><td></td></td></td>								<th></th> <td><td></td></td>		<td></td>		
Matrix :	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	
Units :	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Date Sampled :	10/21/2009																				
Time Sampled :																					
%Solids :	72.7		76.6		76.6		75.3		77.4		77.4		74.0		73.1		75.0		76.4		77.2
Dilution Factor :	1		1		1		1		1		1		1		1		1		1		1
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	
ALUMINUM	9200		7920		7590		7870		8140		6050		7920		7660		7990		5810		5300
ANTIMONY	6.0	J	4.4	J	18.6		10.2		8		6.6		74.4		4.1	J	5.6	U	6.9	J	3.4
ARSENIC	12.6		9.0		17.2		10.5		7.3		8.2		16.5		7.4		4.8		7.2		7.2
BARIUM	826		486		243		164		169		118		314		341		102		549		143
BERYLLIUM	1.8		2.2		0.9		0.7		0.62		0.41	J	0.92		2.1		0.5		0.41	J	0.67
CADMIUM	1.2		0.7	U	0.4	J	0.4		0.41	J	0.49	U	1.6		0.55		0.47	U	0.65	U	0.51
CALCIUM	6100		7330		7590		5130		4380		2190		9180		4870		1140		1900		1420
CHROMIUM	25.8		15.7		25.2		10.8		11.8		9.6		15.1		14.7		9.9		8.3		9.4
COBALT	9.1		5.9	J	7.4		5.2		5	J	4.7	J	7.8		8.6		3.7	J	14.8		3.6
COPPER	147		92		319		90		144		95		1850		66		11		96		47
IRON	41900		40700		27000		12700		13100		12000		23200		35100		10600		11600		14400
LEAD	1140		163		1060		493		400		284		1970		202		20		402		333
MAGNESIUM	938		504	J	1330		1530		955		662		1190		526	J	763		634	J	517
MANGANESE	634	J	168	J	765	J	491	J	541	J	741	J	740	J	494	J	334	J	3760	J	494
MERCURY	2.3		0.2		0.3		0.2		0.16		0.19		0.16		1		0.09	UJ	0.063		0.091
NICKEL	27.2		18.5		39.7		16.1		25.8		20.7		120		22.9		5.7		9.1		7.2
POTASSIUM	1170		1320		1180		455	UJ	384	UJ	368	UJ	613		1010		502		352	UJ	265
SELENIUM	6.1		6.5		3.9	J	1.8	J	2	J	1.8	J	3.1	J	4.8		1.6	J	1.9	J	2.1
SILVER	1.2	U	1.3	U	1.2	U	1.0	U	1	U	0.98	U	1	U	1.1	U	0.94	U	1.3	U	1
SODIUM	494	J	932		256	J	127	UJ	142	UJ	117	UJ	278	UJ	795		100	UJ	178	UJ	113
THALLIUM	2.9		0.4	J	3.1	U	2.6	U	2.6	U	2.4	U	2.6	U	2.8	U	2.3	U	3.3	U	2.6
VANADIUM	39.0		47.1		29.0		22.5		23.4		22.5		30.6		42.9		22		28.1		25.5
ZINC	1260		314		7040		1800		956		899		4280		783		62		383		346
CYANIDE	0.5		3.3	U	3.1		3.3	U	3.1	U	3		3.2		0.089	J	3.1	U	3.1	U	3

Sample Number :	ME00X2	ME00X3	ME00X9	ME00T2	ME00T3	ME00T4	ME00T5	ME00T8								
Sampling Location :	X119	X120	X126	X101	X102	X103	X104	X105								
Matrix :	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil								
Units :	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg								
Date Sampled :	10/21/2009	10/21/2009	10/22/2009	10/20/2009	10/20/2009	10/20/2009	10/20/2009	10/21/2009								
Time Sampled :	dup of X119															
%Solids :	75.3	75.5	76.4	79.3	77.6	73.4	73.6	65.1								
Dilution Factor :	1	1	1	1	1	1	1	1								
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag		
ALUMINUM	7460		7410		6510		9940		5970		9370		4150		8020	
ANTIMONY	1.1	J	1.1	J	7.1	UJ	81.4		20.3		22.8		6.8		13.8	
ARSENIC	7.2		6.4		4.6		34.2		11.1		15.7		11.9		9.1	
BARIUM	218		158		129		377		287		1280		563		239	
BERYLLIUM	0.51	J	0.49		0.58	J	2.3		0.9		0.7		1.5		1.0	
CADMIUM	0.56	U	0.49	U	0.6	U	0.2	J	1.3		0.7	U	0.6	U	0.9	
CALCIUM	959		991		5580	J	9060		30100		2870		1830		8030	
CHROMIUM	8.9		8.6		8.8		19.4		12.4		13.3		17.0		15.8	
COBALT	6.6		6.2		3.8	J	9.0		6.2		8.3		6.2		7.2	
COPPER	12		12		14.8		780		289		443		110		261	
IRON	13200		12000		9340		49800		18200		16000		75700		22900	
LEAD	35		35		43.4	J	5130		1070		825		314		853	
MAGNESIUM	733		745		2130	J	766		11700		1340		289	J	971	
MANGANESE	1420	J	1390	J	344		244	J	556	J	743	J	80	J	403	J
MERCURY	0.078	UJ	0.091	UJ	0.1	J	0.2		0.4		0.1		0.6		0.2	
NICKEL	6.5		6.2		8.9		58.9		36.1		38.6		21.4		40.5	
POTASSIUM	389	UJ	420	UJ	440	J	804		638		564	J	2700		1050	
SELENIUM	1.8	J	1.7	J	1.5	J	6.7		3.1	J	2.1	J	10.9		3.4	J
SILVER	1.1	U	0.99	U	1.2	U	1.3	U	1.1	U	1.4	U	1.1	U	1.3	U
SODIUM	105	UJ	125	UJ	111	UJ	978		315	UJ	151	UJ	1740		298	J
THALLIUM	2.8	U	2.5	U	3	U	3.2	U	2.8	U	3.4	U	4.1		3.2	U
VANADIUM	28.5		24.9		20.4		41.3		21.2		27.6		46.1		33.2	
ZINC	92		100		138		6140		2330		1920		247		2680	
CYANIDE	3.1	U	3.2		3.2	U	3.0	U	3.2		3.3	U	3.4		3.8	U

Sample Number :	ME00X0	Sampling Location :	X117	ME00X1	X118	ME00X4	X121	ME00X5	X122	ME00X6	X123	ME00X7	X124	ME00X8	X125	ME00Y0	X127
Matrix :	Soil	Units :	mg/Kg		Soil		Soil										
Date Sampled :	10/21/2009	Time Sampled :			10/21/2009		10/21/2009		10/21/2009		10/21/2009		10/22/2009		10/22/2009		
%Solids :	79.6	Dilution Factor :	1		74.1		81.7		74.4		77.3		75		56		79.8
ANALYTE	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	
ALUMINUM	6720		8460		7140		6820		7240		9410		9580		8650		
ANTIMONY	125		914		2.3	J	15.5	J	20.3	J	200	J	6.5	J	1.6	J	
ARSENIC	30		181		6.4		16.7		21.9		23.3		8.7		9.7		
BARIUM	265		293		102		265		322		232		459		181		
BERYLLIUM	1		1.6		0.6	J	0.99		0.94		1.7		1.4		0.84		
CADMIUM	3.2		2.7		0.61	U	1.2		2.5		8.9		2.1		0.59	U	
CALCIUM	2070		4620		43900	J	111000	J	41700	J	4270	J	21000	J	2740	J	
CHROMIUM	9.9		14.9		10.6		17.6		26.5		27.7		23		14.8		
COBALT	7.2		14.8		5.5	J	5.9		7.1		28.2		6.6	J	7.3		
COPPER	7890		12800		65.2		275		386		5470		158		39.4		
IRON	21800		103000		13000		21100		25300		29100		20600		22900		
LEAD	5000		49900		103	J	820	J	1010	J	11800	J	1400	J	87.7	J	
MAGNESIUM	686		385	J	2940	J	4250	J	6660	J	891	J	2790	J	1530	J	
MANGANESE	852	J	805	J	750		322		380		548		623		589		
MERCURY	1		0.26		0.13		0.7		0.74		0.16		0.84		0.078	UJ	
NICKEL	46.7		97.4		53.3		48.2		62		1550		25.7		18.6		
POTASSIUM	704		338	UJ	524	J	534		556		613		1470		748		
SELENIUM	3.4		9.9		1.8	J	2.8	J	3.5		4.2		4	J	3.3	J	
SILVER	1.3		8.9		1.2	U	1	U	0.9	U	4.7	J+	1.6	U	1.2	U	
SODIUM	234	UJ	538	U	112	UJ	442	UJ	396	UJ	466	UJ	561	UJ	242	UJ	
THALLIUM	2.4	U	2.4	U	3.1	U	2.5	U	2.3	U	2.7	U	3.9	U	3	U	
VANADIUM	26.9		27.5		18.3		20.3		22.8		16.7		40.2		26		
ZINC	9260		37500		1030		2940		3640		107000		1710		354		
CYANIDE	0.17	J	3.1		3.1	U	0.16	J	0.083	J	3.2	U	4.4	U	3	U	

Figure 3  
Soil Sample Map



0    0.125    0.25    0.5    0.75    1 Miles

